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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/829,192	04/22/2004	Toshio Inoue	112272.01	6053

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EXAMINER

TRAN, BINH Q

ART UNIT	PAPER NUMBER
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3748

DATE MAILED: 11/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/829,192	Applicant(s) INOUE ET AL.	
	Examiner BINH Q. TRAN	Art Unit 3748	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 10/133,410.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>04/04,07/04,05/05</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Receipt and entry of Applicant's Preliminary Amendment dated April 22, 2004 is acknowledged.

Double Patenting

Claims 1-21 are rejected under the judicially created doctrine of double patenting over claims 1-14 of U. S. Patent No. 6,742,327 B2 since the claims, if allowed, would improperly extend the "right to exclude" already granted in the patent.

The subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter, as follows: *the application claims are merely broader than the patent claims.*

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground

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provided the conflicting application or patent is shown to be commonly owned with this application.

See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1-3, 6-13, and 16-21 are rejected under 35 U.S.C. 102 (b) as being anticipated by Yamamoto et al. (Yamamoto) (Patent Number 6,293,095).

Regarding claims 1, 11, and 21, Yamamoto discloses a method and apparatus of controlling an internal combustion engine (1) of a vehicle in which an exhaust purifying catalyst (6) is provided in an exhaust system of the internal combustion engine, the method comprising the steps of controlling burning of fuel to operate the internal combustion engine; and injecting fuel into the internal combustion engine during a moving state of the engine, without causing the fuel to be burned, before a normal operation of the engine by fuel being burned (e.g. See Figs. 1-18; col. 7, lines 45-67; col. 8, lines 1-59; col. 16, lines 1-67).

Regarding claims 2, 12, and 20, Yamamoto further discloses the step of injecting fuel includes injecting fuel into the internal combustion engine that shifts to the moving state, without causing the fuel to be burned, when a predetermined condition is satisfied while the vehicle is running (e.g. See Figs. 1-18; col. 7, lines 45-67; col. 8, lines 1-59; col. 16, lines 1-67).

Regarding claims 3, and 13, Yamamoto further discloses the step of stopping burning of the fuel by cutting a fuel supply to the internal combustion engine (e.g. See Figs. 1-18; col. 16, lines 1-67).

Regarding claims 6, and 16, Yamamoto further discloses the step of not injecting fuel into the internal combustion engine that shifts to the moving state based on a temperature of the exhaust purifying catalyst (e.g. See Figs. 1-18; col. 7, lines 45-67; col. 8, lines 1-59; col. 16, lines 1-67).

Regarding claims 7, and 17, Yamamoto further discloses the step of injecting fuel includes injecting fuel into the internal combustion engine that shifts to the moving state and not igniting the fuel (e.g. See Figs. 1-18; col. 7, lines 45-67; col. 8, lines 1-59; col. 16, lines 1-67).

Regarding claims 8, and 18-19, Yamamoto further discloses the step of driving the internal combustion engine by the burning of the fuel when the speed of the internal combustion engine has become equal to, or greater than, a predetermined speed (e.g. See Figs. 1-18; col. 7, lines 45-67; col. 8, lines 1-59; col. 16, lines 1-67).

Regarding claim 9, Yamamoto further discloses the step of not injecting fuel into the internal combustion engine that shifts to the moving state when the speed of the internal combustion engine is equal to, or greater than, a predetermined speed (e.g. See Figs. 1-18; col. 7, lines 45-67; col. 8, lines 1-59; col. 16, lines 1-67).

Regarding claim 10, Yamamoto further discloses the step of injecting fuel includes injecting fuel for a predetermined amount of time into the internal combustion engine that shifts to the moving state (e.g. See Figs. 1-18; col. 7, lines 45-67; col. 8, lines 1-59; col. 16, lines 1-67).

Claims 1-21 are rejected under 35 U.S.C. 102 (e) as being anticipated by Sugiura et al. (Sugiura) (Patent Number 6,220,019).

Regarding claims 1, 11, and 21, Sugiura discloses a method and apparatus of controlling an internal combustion engine (1) of a vehicle in which an exhaust purifying catalyst (116) is provided in an exhaust system of the internal combustion engine, the method comprising the steps of controlling burning of fuel to operate the internal combustion engine; and injecting fuel into the internal combustion engine during a moving state of the engine, without causing the fuel to be burned, before a normal operation of the engine by fuel being burned (e.g. See Fig. 4-6; col. 6, lines 59-67; col. 7, lines 1-63; Claim 1).

Regarding claims 2, 12, and 20, Sugiura further discloses the step of injecting fuel includes injecting fuel into the internal combustion engine that shifts to the moving state, without causing the fuel to be burned, when a predetermined condition is satisfied while the vehicle is running (e.g. See Fig. 4-6; col. 6, lines 59-67; col. 7, lines 1-63; Claim 1).

Regarding claims 3, and 13, Sugiura further discloses the step of stopping burning of the fuel by cutting a fuel supply to the internal combustion engine (e.g. See Fig. 4-6; col. 6, lines 59-67; col. 7, lines 1-63; Claim 1).

Regarding claims 4, and 14, Sugiura further discloses the step of injecting fuel includes injecting fuel into the internal combustion engine that shifts to the moving state, without causing the fuel to be burned, when the vehicle starts to be driven by a motor after being driven by the internal combustion engine (e.g. See Fig. 4-6; col. 6, lines 59-67; col. 7, lines 1-63; Claim 1).

Regarding claims 5, and 15, Sugiura further discloses the step of injecting fuel includes injecting fuel into the internal combustion engine that shifts to the moving state, without causing the fuel to be burned, before the vehicle starts to be driven by the internal combustion engine and after being driven by a motor (e.g. See Fig. 4-6; col. 6, lines 59-67; col. 7, lines 1-63; Claim 1).

Regarding claims 6, and 16, Sugiura further discloses the step of not injecting fuel into the internal combustion engine that shifts to the moving state based on a temperature of the exhaust purifying catalyst (e.g. See Fig. 4-6; col. 6, lines 59-67; col. 7, lines 1-63; Claim 1).

Regarding claims 7, and 17, Sugiura further discloses the step of injecting fuel includes injecting fuel into the internal combustion engine that shifts to the moving state and not igniting the fuel (e.g. See Fig. 4-6; col. 6, lines 59-67; col. 7, lines 1-63; Claim 1).

Regarding claims 8, and 18-19, Sugiura further discloses the step of driving the internal combustion engine by the burning of the fuel when the speed of the internal combustion engine has become equal to, or greater than, a predetermined speed (e.g. See Fig. 4-6; col. 6, lines 59-67; col. 7, lines 1-63; Claim 1).

Regarding claim 9, Sugiura further discloses the step of not injecting fuel into the internal combustion engine that shifts to the moving state when the speed of the internal combustion engine is equal to, or greater than, a predetermined speed (e.g. See Fig. 4-6; col. 6, lines 59-67; col. 7, lines 1-63; Claim 1).

Regarding claim 10, Sugiura further discloses the step of injecting fuel includes injecting fuel for a predetermined amount of time into the internal combustion engine that shifts to the moving state (e.g. See Fig. 4-6; col. 6, lines 59-67; col. 7, lines 1-63; Claim 1).

Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure and consists of four patents:

Inoue et al. (Pat. No. 6785603), Kataoka et al. (Pat. No. 6834632), Yamamoto et al. (Pat. No. 6293095), and Tashiro et al. (Pat. No. 6901747) all disclose an exhaust gas purification for use with an internal combustion engine.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Binh Tran whose telephone number is (571) 272-4865. The examiner can normally be reached on Monday-Friday from 8:00 a.m. to 4:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas E. Denion, can be reach on (571) 272-4859. The fax phone numbers for the organization where this application or proceeding is assigned are (571) 273-8300 for regular communications and for After Final communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BT
November 28, 2005



Binh Q. Tran
Patent Examiner
Art Unit 3748